

Two new species in the genus *Meleonoma* Meyrick (Lepidoptera: Oecophoridae) from Taiwan

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Abstract: Two new species in the genus *Meleonoma* are described from Taiwan, China: *M. margisclerotica* Wang sp. nov. and *M. apicispinata* Wang sp. nov. Diagnostic characters are provided and photos of adults and genitalia are included.

Key words: Microlepidoptera; Gelechioidea; taxonomy; China

台湾模织蛾属二新种记述（鳞翅目：织蛾科）

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摘要：记述中国台湾模织蛾 *Meleonoma* Meyrick 2 新种：骨缘模织蛾 *M. margisclerotica* Wang sp. nov. 和端刺模织蛾 *M. apicispinata* Wang sp. nov.。提供了鉴别特征以及成虫和外生殖器特征图。

关键词：小蛾类；麦蛾总科；分类；中国

Introduction

Meyrick (1914) established the genus *Meleonoma* under the family Oecophoridae, with *Cryptolechia stomota* Meyrick, 1910 as the type species. It consists of twenty-three species worldwide, distributed in Australia, India, Sri Lanka, Madagascar, China, Sikkim, and Borneo (Gaede 1939; Viette 1955; Clarke 1965; Common 1996; Li & Wang 2002, 2004; Lvovsky 2015).

Meleonoma is characterized by the narrow lanceolate forewing with the ground color usually yellow; by the male genitalia having a spear-shaped or slender sticklike uncus, an entirely membranous or partly sclerotized circular gnathos, and an elongate or triangular saccus; by the female genitalia with an entirely or partly sclerotized ductus bursae, and a signum often with spines if present.

This paper describes two new species from Taiwan, China. The examined specimens were loaned from the Natural History Museum of Humboldt University, Berlin, Germany. Genitalia dissection and mounting methods follow the methods introduced by Li (2002). Photographs of adults were taken with a Leica M205A stereomicroscope plus Leica Application Suite 4.2 software, and illustrations of genitalia were prepared using a Leica DM750 microscope plus the same software. The type specimens are deposited in the above mentioned museum.

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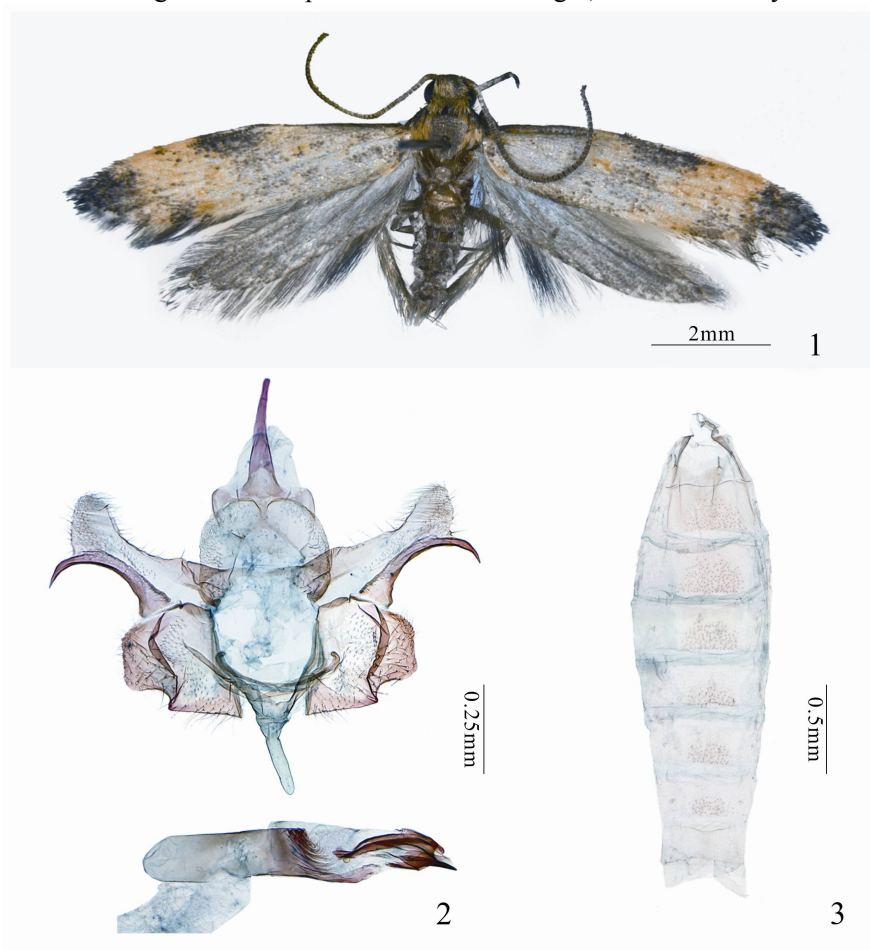
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Taxonomy

1. *Meleonoma margisclerotica* Wang sp. nov. (Figs. 1–3)

Holotype. ♂, **China**, Taiwan, Nantou, Hueisun Exp. Forest, 25–27-IV-1999, 600 m, leg. Mey & Ebert, genitalia slide No. MNHU-NK115.

Diagnosis. This new species can be separated from its congeners by the valva having a sclerotized thorn along the median part of the ventral margin, which is distally free.



Figures 1–3. *Meleonoma margisclerotica* Wang sp. nov. 1. Adult; 2. Male genitalia; 3. Abdomen.

Description. Adult (Fig. 1). Wing expanse 13.0 mm. Head pale orange yellow, tinged with greyish brown. Labial palpus pale orange yellow; second segment with dense brown scales on outer surface, with sparse brown scales on inner surface, annulated with brown at apex; third segment with dense brown scales except pale orange yellow distally. Antenna pale yellow, ringed with dark brown on flagellum. Thorax and tegula blackish brown, yellow posteriorly. Forewing orange yellow, with dark brown scales, denser along costal and ventral margins, forming a narrow streak along costal 1/3 and a large subovate patch slightly beyond middle; large blackish blotch at apex, ranging from approximately distal 1/6 of costal margin obliquely inward to end of fold; cell dots indistinct due to erosion; cilia dark brown. Hindwing and cilia

greyish brown. Legs whitish yellow; tibiae and tarsi greyish brown on outer surface, fore and mid tibiae yellow at middle and at apex; tarsi yellow at apex of each segment.

Male genitalia (Fig. 2). Uncus slightly longer than saccus, wide at base, gradually narrowed to blunt apex. Gnathos with lateral angle expanded and sclerotized. Valva broad basally, narrowed medially; distal 1/3 triangular, narrowly rounded at apex; costa shallowly concave at 2/3; ventral margin concaved beyond middle, with a large heavily sclerotized thorn along median part, its distal part free, curved ventrad, pointed apically. Sacculus short and broad, shorter than saccus, transversely trapezoidal, blunt at apex, with a narrow sclerotized transverse band from dorsal 2/5 to ventral 3/5; ventral margin with basal 3/5 straight, concave semicircularly beyond 3/5; transtilla slender, narrowed to pointed apex. Juxta a narrow arched band. Saccus wide at base, narrowed gradually to middle; distal half uniform, sticklike, rounded at apex. Aedeagus longer than valva, straight, basal half more sclerotized, uniform, medially with fine rumples curving in one direction, with sclerotized narrow plates in distal third, one more distal plate produced to an apical spine. Spines on abdominal tergites arranged subtriangularly (Fig. 3).

Female unknown.

Distribution. China (Taiwan).

Etymology. The specific epithet is derived from the Latin *marg-* (marginal) and *scleroticus* (sclerotized), referring to the sclerotized thorn along median part of the sacculus on the ventral margin.

2. *Meleonoma apicispinata* Wang sp. nov. (Figs. 4–6)

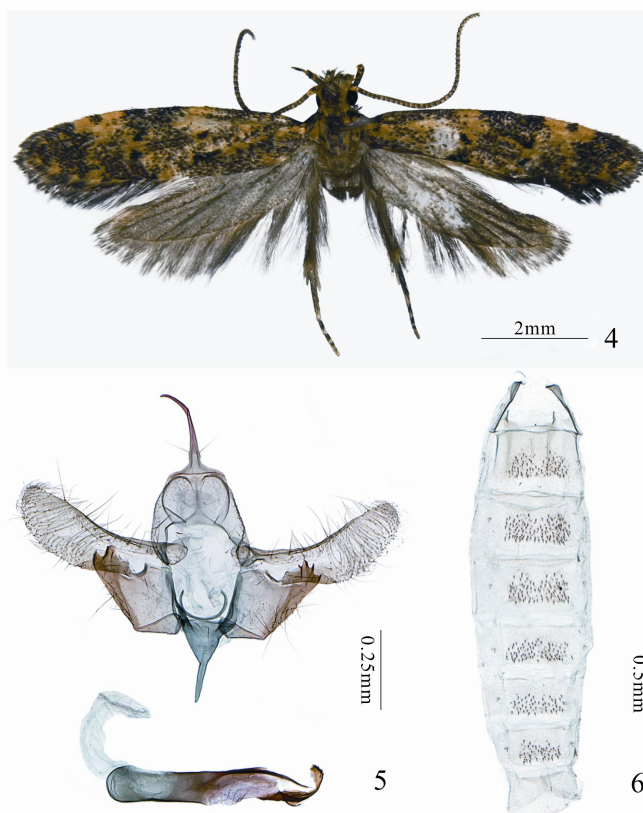
Holotype. ♂, China, Taiwan, Nantou, Hueisun Exp. Forest, 25–27-IV-99, 600 m, leg. Mey & Ebert, genitalia slide No. MNHU-NK123. **Paratype.** 1♂, same data as holotype.

Diagnosis. This new species can be separated from its congeners by the broad sacculus having a few short spines apically.

Description. Adult (Fig. 4). Wing expanse 13.0–13.5 mm. Head yellow, with scales grey-tipped on vertex, posterior area grey except yellow laterally. Labial palpus dark brown, second segment mixed with pale orange yellow, third segment yellow at base and at apex. Antenna yellow, dorsal surface covered with dark brown on scape, ringed with dark brown on flagellum. Thorax and tegula orange yellow, with dark brown scales; thorax longitudinally dark brown on middle portion. Forewing orange yellow, with scattered dark brown scales, dense dark brown scales along costal and ventral margins, forming irregular dark diffusion; costal margin with a streak along basal 1/3, with a large blotch beyond middle; apex blackish brown, from distal 1/7 of costal margin obliquely inward to end of fold, interrupted beyond tornus by yellow; cell with one black spot at middle, with two black spots at end, with one above another; fold with an elongate spot at about 2/3, just below spot at middle of cell; cilia deep greyish brown. Hindwing and cilia greyish brown. Legs yellow; fore and mid legs with outer surface blackish brown, tibiae yellow at middle and at apex, tarsi yellow at apex of each segment; hind leg with outer surface greyish brown, tibiae yellow around base of each pair of spurs, tarsi yellow at apex of each segment.

Male genitalia (Fig. 5). Uncus slightly longer than saccus, slender, gradually narrowed to pointed apex. Gnathos slender, sclerotized at lateral angle. Valva with basal 2/5 narrow, distal 3/5 wider, almost uniform, slightly narrowed from before rounded apex; costa shallowly

concave; ventral margin arched outward medially. Sacculus broad, rectangular, basal 2/5 about twice as wide as that of valva; distal 3/5 narrowed, apically with several short spines; dorsal margin concave medially, ventral margin straight basally, curved by 90 degree approximately beyond 2/5, then obliquely straight toward apex. Saccus with basal half triangular, gradually narrowed from base to middle; distal half obviously slender, uniform, sticklike, pointed at apex. Juxta a narrow circle with broad opening posteriorly. Aedeagus straight, almost uniform, more sclerotized basally, distal half sclerotized dorsally, produced to a curved band-shaped plate ventrally. Spines on abdominal tergites arranged subrectangularly (Fig. 6).



Figures 4–6. *Meleonoma apicispinata* Wang sp. nov. 4. Adult; 5. Male genitalia; 6. Abdomen.

Female unknown.

Distribution. China (Taiwan).

Etymology. The specific epithet is derived from the Latin *apic-* (apical) and *spinatus* (spinous), referring to the sacculus having several short apical spines.

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